

AMENDMENTS TO THE CLAIMS

1. (Original) A reflective pavement marker comprising:

a shell having at least one side wall having a reflective portion, wherein said shell forms an interior cavity, said reflective portion having an inner surface partially defining said cavity, said shell formed of a polymer selected from the group consisting of polyacrylate and polycarbonate, said polymer having a tensile strength of greater than 9,000 pounds per square inch and a ratio of tensile strength to flexural modulus of between 0.021-0.050:1;

a reflective coating covering said inner surface of said reflective portion;

a bonding coating covering at least said reflective coating; and

a filler material disposed within the interior cavity of said shell.

2. (Original) A reflective pavement marker as set forth in claim 1 wherein the tensile strength of said polymer is greater than 10,000 pounds per square inch.

3. (Original) A reflective pavement marker as set forth in claim 1 wherein said polymer has an optical transmittance greater than 85%.

4. (Original) A reflective pavement marker as set forth in claim 1 wherein said polymer is a polyacrylate.

5. (Currently Amended) A reflective pavement marker as set forth in claim [[4]] 1 wherein said polymer comprises methyl methacrylate.

6. (Currently Amended) A reflective pavement marker as set forth in claim [[4]] 1 wherein said polymer is a poly(ethyl acrylate/methyl methacrylate) copolymer of ethyl acrylate and methyl methacrylate.

7. (Currently Amended) A reflective pavement marker as set forth in claim 1 wherein said shell includes a top wall[[,]] and side wall ~~and reflective end wall with reflective portion~~ that are integral and formed as one piece.

8. (Original) A reflective pavement marker as set forth in claim 1 wherein said reflective portion includes a plurality of integrally formed cube-shaped members arranged in a grid pattern.

9. (Original) A reflective pavement marker as set forth in claim 1 wherein said reflective coating is a metal material.

10. (Original) A reflective pavement marker as set forth in claim 1 wherein said bonding coating is a bonding primer.

11. (Original) A reflective pavement marker as set forth in claim 10 wherein said bonding primer is an acrylic latex primer.

12. (Original) A reflective pavement marker as set forth in claim 10 wherein said bonding primer is a water based primer.

13. (Original) A reflective pavement marker comprising:

a shell having at least one side wall having a reflective portion, wherein said shell defines an interior cavity, and said reflective portion and said shell are integral and formed as one piece, said shell formed of a polymer selected from the group consisting of polyacrylate and polycarbonate, said polymer having a tensile strength of greater than 9,000 pounds per square inch and a ratio of tensile strength to flexural modulus of between 0.026-0.050:1;

wherein said reflective portion includes a plurality of integrally formed cube-shaped members arranged in a grid pattern on an inner surface;

a reflective coating covering said inner surface of said reflective portion, wherein said reflective coating is a metal material;

a bonding coating covering said reflective coating to prevent separation of said reflective coating from said reflective portion, wherein said bonding coating is a bonding primer; and

a filler material disposed within said cavity of said shell.

14. (Original) A reflective pavement marker as set forth in claim 13 wherein the tensile strength of said polymer is greater than 10,000 pounds per square inch.

15. (Original) A reflective pavement marker as set forth in claim 13 wherein said polymer has an optical transmittance greater than 85%.

16. (Original) A reflective pavement marker as set forth in claim 13 wherein said polymer is a polyacrylate.

17. (Currently Amended) A reflective pavement marker as set forth in claim 16 13 wherein said polymer comprises methyl methacrylate.

18. (Currently Amended) A reflective pavement marker as set forth in claim 16 13 wherein said polymer is a ~~poly(ethyl acrylate/methyl methacrylate)~~ copolymer of ethyl acrylate and methyl methacrylate.

19. (Original) A reflective pavement marker as set forth in claim 13 wherein said bonding primer is an acrylic latex primer.

20. (Original) A method of forming a reflective pavement marker, said method comprising the steps of:

forming a shell having at least one reflective portion with an inner surface wherein the shell forms an interior cavity, said shell formed of a polymer selected from the group consisting of polyacrylate and polycarbonate, said polymer having a tensile strength of greater than 9,000 pounds per square inch and a ratio of tensile strength to flexural modulus of between 0.021-0.050:1;

coating said inner surface with a metal material;

covering at least said metal material with a bonding compound; and

filling the cavity of the shell with a filler material.

21. (Original) A reflective pavement marker as set forth in claim 20 wherein the tensile strength of said polymer is greater than 10,000 pounds per square inch.

22. (Original) A reflective pavement marker as set forth in claim 20 wherein said polymer has an optical transmittance greater than 85%.

23. (Original) A reflective pavement marker as set forth in claim 20 wherein said polymer is a polyacrylate.

24. (Original) A reflective pavement marker as set forth in claim 20 wherein said polymer comprises methyl methacrylate.

25. (Currently Amended) A reflective pavement marker as set forth in claim 20 wherein said polymer is a poly(ethyl acrylate/methyl methacrylate) copolymer of ethyl acrylate and methyl methacrylate.